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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/589,973	06/08/2000	Eric J. Hansen	71189-1300	9893

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MCGARRY BAIR LLP  
171 MONROE AVENUE  
SUITE 600  
GRAND RAPIDS, MI 49503

EXAMINER

HAMLIN, DERRICK G

ART UNIT	PAPER NUMBER
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1751

4

DATE MAILED: 02/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-4

**Office Action Summary**

Application No.

09/589,973

Applicant(s)

J. WILLIAMS ET AL.

Examiner

Derrick G. Hamlin

Art Unit

1751

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Evaluations of level of ordinary skill in the art requires consideration of factors such as various prior art approaches employed, types of problems encountered in the art, rapidity with which innovations are made, sophistication of technology involved, educational background of those actively working in the field, commercial success, failure of others, and the inventor's educational level.

The "person having ordinary skill" in this art has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this case reasonably reflect this level of skill.

Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo et al. (5,853,430), and further in view of Ligman (5,555,595) or Sham (5,386,612).

Shindo discloses a method of predissolving a detergent composition, comprising the steps of: a) providing a hand-held container; and b) combining a detergent composition, an indicator and a solvent in the container to form a concentrated detergent solution having a surface tension value of from about 10 dyne/cm to about 50

Art Unit: 1751

dyne/cm, wherein the indicator indicates when the detergent composition is sufficiently dissolved in the solvent (col. 44, lines 49-57). The container and concentrated detergent solution described therein are applicable to many types of cleaning operations, such as cleaning and/or pre-treating surfaces such as carpets and fabrics (col. 3, lines 2-6). The preferred bleach is a preformed peracid bleach and/or a peroxygen bleach (col. 5, lines 32-33). The detergent compositions herein can optionally include one or more detergent materials or other materials for assisting or enhancing cleaning performance, treatment of the substrate to be cleaned, or to modify the aesthetics of the detergent composition, such as perfumes, colorants, dyes, etc. (col. 5, lines 42-46). Peroxohydrates are the most common examples of "hydrogen peroxide source" materials and include the perborates, percarbonates, perphosphates, and persilicates (col. 15, lines 50-52). Preferred bleach activators include N,N,N,N'-tetraacetyl ethylene diamine (TAED) or any of its close relatives including the triacetyl or other unsymmetrical derivatives (col. 21, lines 29-31); additionally esters of an organic acid and ethylene glycol, diethylene glycol or glycerin may be used (col. 25, lines 51-53). Acrylic/maleic-based copolymers may also be used as a preferred component of the dispersing/anti-redeposition agent (col. 31, lines 66-67).

The primary reference is deficient, as it fails to teach a carpet cleaning machine employing the cleaning solution disclosed. The primary reference does indicate that the composition is applicable to many types of cleaning operations for surfaces and that machines may be employed. Therefore, one would be motivated to employ one of the

Art Unit: 1751

following carpet cleaning machines to clean a carpet with the carpet cleaning solution of the reference.

Ligman discloses a cleaner unit for carpet and upholstery and the like includes an adjustable power control so that electrical power usage can be set in accordance with available circuit capacity. The cleaner unit includes multiple electrical loads such as a vacuum motor, a pump for delivering a cleaning fluid to a cleaning head or tool, and one or more resistance heaters for heating the cleaning fluid, wherein these loads are adapted for plug-in connection by one or more power cords to a standard domestic power circuit. An ammeter permits the current load to be monitored. In the preferred form, the adjustable power control is associated with one of the resistance heaters and permits the heater current load to be variably set according to the available current capacity of the power circuit. (abstract)

Although the reference fails to teach that the cleaning solution is heated to a specific temperature, it does indicate that the temperature may be adjusted to a desired temperature. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to practice the instantly claimed method using the carpet cleaning solution of Shindo with the carpet cleaner of Ligman.

Sham discloses a vacuum cleaning apparatus is provided which includes a housing having a handle portion and a nozzle portion. A reservoir is defined in the housing for retaining cleaning solution or water, and a heating unit is associated with the reservoir for heating the liquid so as to generate steam for delivery to a flat surface such as a window to be cleaned. A squeegee assembly is mounted to the housing adjacent

Art Unit: 1751

the nozzle portion for wiping the window after liquid has been deposited thereon. A motor driven fan assembly is disposed within the housing in communication with the nozzle portion for drawing excess liquid and debris into the nozzle portion. The nozzle portion defines structure for separating and containing the liquid, which is drawn into the apparatus. (abstract)

Although the reference fails to teach that the cleaning solution is heated to a specific temperature, it does indicate that the solution is steamed and depending on the solvent used the temperature would fall within the claimed ranges. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to practice the instantly claimed method using the carpet cleaning solution of Shindo with the carpet cleaner of Sham.

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

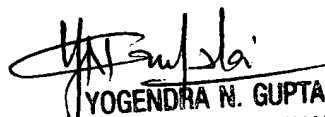
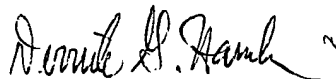
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick G. Hamlin whose telephone number is (703) 305-0590. The examiner can normally be reached on Monday-Thursday and alternating Fridays from 7:30 AM - 4:00 PM.

If reasonable attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Group is (703) 305-3600.

Art Unit: 1751

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Derrick G. Hamlin



YOGENDRA N. GUPTA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700